NEW

Part-II   3-Tier

2017

COMPUTER SCIENCE

(General)

PAPER—IIB (Set–1)

(PRACTICAL)

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Answer any *one* question.   1×40

1. Consider the following table :   5×8

   CUSTOMER (ID, Name, City, Phone, Age)

   TRAVEL (Travel_ID, ID, Place, No_of_days, cost, month of visit)

   (a) Create the database tables and insert atleast five records.

   (b) Find the customer who lives in "Kolkata" and visited "Goa".

   (c) Find the names of the customer who have visited "Kashmir" in July.

(Turn Over)

(d) Find the name of the customer who spent more than Rs. 70,000 for visited any place.

(e) Find the names of the customer whose age is below 35 and visited 'Delhi".

2. Consider the following database : 5×8

Hotel (H_id, H_name, location, star_rating)

Room (R_no, H_id, type, room_charge).

Guest (G_name, H_id, R_no, G_location, date).

(a) Create the database tables and insert atleast five records.

(b) Find the numbers of room booked in "Victoria Club Hotel" on a particular date say 10-04-2017.

(c) List the name of the hotel (HG_name, name) which is situated in "Darjeeling" and whose star rating is greatn than " *** ".

(d) Find the names of the guest who have booked a room which is cost more than Rs. 2000/- per day.

(e) Name of the Hotels which have atleast two types of rooms.

3. Consider the following database : 5×8

Flights (Fl_no. from, to, distances, departs, arrives, fare).

User (user_name, u_id, fl_no, u_from, u_to, fly_date).

(a) Create the database tables and insert at least five

records.

(b) Find the names of the user who have flied form "Kolkata" on 01-04-2017.

(c) Find the fare of the flight which will fly from "Delhi" to "Dubai".

(d) Find the total fares of the customer who will fly from "Mumbai" to "Kolkata" and return back on the same date.

(e) Find the flight number which will travel more than 10,000 km and whose fare is below Rs. 15,000/-.

4. Consider the following database :   5×8

Book (b_no, isbn, b_name, author, price).

Issued (b_no, issued_to, date_of_issue, date_of_return).

(a) Create the database tables and insert at least five records.

(b) Find the book name which is issued by more than five students.

(c) Find the minimum priced book in the library.

(d) How many books have been issued on a particular date "01-04-2017".

(e) Find the name of the book which has been issued to a particular person who have not taken any book earlier.

Practical Note Book — 05

Viva-Voce — 05

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NEW

Part-II 3-Tier

2017

COMPUTER SCIENCE

(General)

PAPER—III (Set-1)

(PRACTICAL)

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Group—A

[Digital Electronics]

Answer any *one* question.   1×25

1. Construct an OR gate using NOR gates only. Verify the truth table.

2. Implement the following boolean function using logic gates.

f(a, b, c) = $a\bar{b} + b\bar{c}$.

3. Construct and demonstrate the use of half subtractor.

4. Construct a full adder using minimum no. of NOR gates only.

5. Construct and verify a 4×1 MUX.

6. Implement the following expression using basic gates :

f(a, b, c) = Σ(0, 3, 5, 7)

7. Construct a 2 to 4 line decoder and verify it's truth table.

Group—B

(Programming in C & Data Structure)

Answer any *one* question.　　　1×35

1. Read a character string from keyboard. Eliminate all spaces between two consecutive words and print it.

(e.g. Input : I love my India.

Output : I love my India.)

2. Read an array integer in ascending order. Find an element using binary search technique. If the element is found print the position of the element and if not, print a proper message.

3. Read an array of integers. Sort the integers using bubble sort technique.

4. Read an array of integers. Sort the integers using insertion sort technique.

5. Read two matrices. Multiply those matrices and print the resultant matrix. If multiplication is not possible, print proper message.

6. Write a program to calculate the factorial of an integer using recursion.

Group—C

(MS-Word, Excel, Power Point)

Answer any *one* question.   1×20

1. Create the front page of your practical note book of the subject 'Computer Science'.

2. Create a powerpoint presentation with at least five slides describing the role of computer in everyday use.

3. Use MS-Excel and prepare a sample marksheet of a student considering marks in each subject. Calculate total marks and provide grade to the student considering his / her average marks.

Viva-voce 10

Practical Note Book 10

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